

## **Site Search Process and Selection**

Section 16-50j-74(j) of the Regulations of Connecticut State Agencies requires the applicant to submit a statement that describes “the narrowing process by which other possible sites were considered and eliminated.” In accordance with this requirement, the description of the general site search process, the identification of the target search area and the alternative locations considered for development of the proposed Facility are provided below.

As an FCC licensed wireless carrier, T-Mobile decides to seek out a site in an area based upon the needs of its wireless infrastructure and extensive research of the subject area. T-Mobile chooses a target area central to the area in which it has identified coverage and/or capacity needs. The area targeted is the geographical location where the installation of a site would, based on general radio frequency engineering and system design standards, likely address the identified problem. T-Mobile’s goal is to locate sites that will remedy coverage or capacity issues, while resulting in the least environmental impact. In this case, T-Mobile has searched for a site in this area for several years, and has identified the Shore Road Site as the best possible location for a wireless facility.

T-Mobile is sensitive to State and local desires to minimize the construction of new towers, and it does not pursue development of a new facility where an acceptable existing structure can be found. In general, T-Mobile’s site acquisition personnel first study the area in and near the search ring to determine whether any suitable structure exists. If T-Mobile cannot find a structure with appropriate height and structural capabilities, it turns to industrial / commercial areas or individual parcels that have appropriate environmental and land use characteristics. The list of potential locations is limited by the willingness of property owners to make their property available. Radio frequency engineers study potentially suitable and available locations to determine whether the locations will meet the technical requirements for a site in the area. Analysis of potential environmental effects and benefits may further narrow the alternatives. The weight given relevant factors varies for each search, depending on the nature of the area and the availability of potential sites.

In the area of Old Lyme, which is the subject of this site search, there are no existing towers, transmission line structures or other suitable structures. Moreover, any existing towers are too far from the target area to provide coverage specifically to the target area. The nearest towers and suitable structures are already in use by T-Mobile. Finally, the proposed site is located within the target search area and abuts the Amtrak rail line, which is a component of the coverage goal.

The locations considered and the reasons locations other than the proposed Shore Road Site were not selected are outlined below:

1. 287 Shore Road, vacant church, corner of Shore Road and Swan Ave. This property hosts a vacant church, with a flat roof steeple that is approximately thirty-five feet tall. T-Mobile radio frequency engineers reviewed site and determined that the rooftop was too low to afford adequate coverage.

2. Existing Water Tank located off Cross Lane. This site hosts a water tank, with a height of approximately twenty-five feet. T-Mobile radio frequency engineers reviewed and determined that the tank structure is too low to afford adequate coverage, particularly since the water tank does not extend beyond the existing tree line.

3. 240-1 Shore Road (Route 156), Old Lyme Self Storage. This site is closer to residential homes than the proposed Site. It is also located approximately 250 feet away from town recreational fields, directly north across Amtrak rail line. The owner expressed a lack of interest in installing a tower on this site.

4. 234 Shore Road. This site hosts an approximately thirty foot tall office building. T-Mobile radio frequency engineers reviewed site and determined that the existing rooftop was too low to afford adequate coverage.

As a result, T-Mobile has determined that the property owned by South Shore Landing Self Storage at 232 Shore Road (the "Property") is superior to other properties in the area. The Property is zoned for light industrial (LI-80) and is five acres. Access to the Site is across an existing driveway and across an existing gravel parking lot on the Property. The Property is currently used as a storage facility. It is also set back approximately 900 feet from Shore Road, with excellent screening from mature trees. There are no residential homes in the immediate area. There is also a large track of forest immediately to the north and east of the proposed Site. AT&T has expressed an interest to co-locate on the proposed Facility.

The proposed Shore Road site (the "Facility") would enhance wireless service availability to existing and future T-Mobile wireless device users. Enhanced coverage provided by the Facility would allow T-Mobile subscribers to use voice and data services reliably as well as to connect to Emergency 911 services. The intended coverage area of the Facility includes Route 156, Mill Creek Road, Hawks Nest Road and Cross Lane just south of Interstate 95 in Old Lyme as well as the Amtrak rail line that passes through this area. Additionally, the Facility would provide capacity relief for the current sites that presently cover this area from outer lying areas.